

Ser. No. 10/541,764
Office Action Date: January 22, 2009

Customer No. 24498
Attorney Docket No. PU030016

Remarks/Arguments

In the non-final Office Action dated January 22, 2009, it is noted that claims 1-3 and 7-9 are pending; that claims 7-8 are rejected under 35 U.S.C. §101; that claims 1-3 and 7-9 stand rejected under 35 U.S.C. §103.

Rejection Of Claims 7 and 8 Under 35 USC §101

Claims 7, and 8 stand rejected under 35 U.S.C. §101 as not falling within one of the four statutory categories of invention apparently supported by *In re Bilski*, 88 U.S.P.Q.2d 1385 (CAFC 2008). This rejection is respectfully traversed.

Claim 7 calls for:

A method of adjusting a time base according to a relative time difference comprising the steps of:
determining a relative time difference between a time stamp and a previous time stamp;
communicating the relative time difference to a transmitter having a time base as one feature of transmission;
transmitting the relative time difference to one or more wireless station receivers, wherein each of the one or more wireless station receivers adjusts the time base according to the relative time difference. [Emphasis supplied].

From the emphasized language of claim 7, it is clear that the steps in the method are tied to a particular machine. The communicating step is performed in conjunction with a transmitter to communicate the relative time difference. In turn and upon receipt at the transmitter, the relative time difference is then transmitted to one or more wireless receivers. When the relative time difference is received by the one or more wireless receivers, it is utilized in the adjustment of the time base at the one or more wireless receivers. Thus, the claim limitations are clearly accomplished in a communication system having a transmitter and one or more wireless receivers.

Contrary to the assertion in the Office Action, the method including the step of adjusting the time base is not so broad "that the claim could be completely performed mentally, verbally or without a machine." *See Office Action at page 2.* The method clearly calls for interaction with a transmitter and with one or more wireless receivers. The claim goes on to recite that "each of the one or more wireless station receivers adjusts the time base according to the relative time difference." If the receiver is required to adjust its time base according to the claimed language, such an adjustment cannot be performed "mentally, verbally or without a

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machine.” *Ibid*. Thus, the claim as a whole is sufficiently well defined that it must be performed by a machine such as a transmitter and one or more wireless receivers.

In light of the remarks above, it is submitted that claim 7 and the claims dependent thereon recite steps performed by a method tied to a transmitter and one or more wireless receivers, that is, a machine. Therefore, it is believed that claims 7-8 fall within one of the four statutory categories of invention. Moreover, it is believed that these claims are allowable under 35 U.S.C. §101. Withdrawal of this rejection is respectfully requested.

Rejection Of Claims 1, 2, 7 and 9 Under 35 USC §103

According to the present Office Action at page 3, “Claims 1, 2, 7, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Bove ... in view of Eerenberg”. This rejection is respectfully traversed.

A *prima facie* case of anticipation has not been made by the USPTO in this case. Although the heading on page 2 of the Office Action and the subsequent introductory paragraphs on page 3 thereof appear to suggest a rejection under 35 U.S.C. §103, the plain and clear language of the actual grounds of rejection in the paragraph on page 3 unmistakably refers to anticipation and 35 U.S.C. §102. Two references are used in this anticipation rejection. The references are not even remotely related to each other. Thus, the rejection on the basis of two references fails as being improper under the statute and the related regulations governing anticipation. A *prima facie* case of anticipation has not been established against the claims.

For these reasons, it is submitted that claims 1-3 and 7-9 are not anticipated by any of the references including Bove and Eerenberg. Claims 1-3 and 7-9 are therefore believed to be allowable under 35 U.S.C. §102. Withdrawal of this rejection is respectfully requested.

In the event that the Examiner mistakenly used the anticipation language in error for rejecting claims 1-3 and 7-9, Applicants have provided additional remarks immediately below traversing an assumed rejection for obviousness over Bove and Eerenberg.

Claims 1, 7, and 9 are independent claims. Claim 2 depends directly from claim 1. Claims 7 and 9 include limitations that are substantially similar to those found in claim 1. In view of the similarities between the limitations in the independent claims, the remarks below will be made with respect to claim 1 and will be understood to pertain equally to claims 7 and 9.

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Claim 1 calls for:

An apparatus for wirelessly transmitting and receiving digital video data, comprising:
a means for receiving a time stamp indicating a time of a video transmission;
a means for determining a relative time difference between the time stamp and a previous time stamp;
a means for communicating the relative time difference to a transmitter having as one feature of transmission a time base;
a means for the transmitter to adjust the time base according to the relative time difference.

Bove compares time stamps for two separate and different video and data streams, namely, the image stream and the mask (annotation) stream. *See Bove at paragraph [0083].* Bove performs this comparison in the decompress thread in order to synchronize the display of mask overlays to the image video so that the masks will appear to overlay the associated video images exactly. *Ibid.* The time stamp (i.e., time stamp 218) in the mask overlay frame is said to come from Bove's video encoder and is further said to be used to synchronize the mask overlays with the video frames. *See Bove at paragraph [0061].*

It is admitted in the present Office Action that Bove does not teach, show, or suggest "means for receiving a time stamp indicating a time of video transmission", as defined in claims 7 and 9. This is consistent with Bove's apparent teachings that his time stamps are a reference to specific video frames in the video image stream, which is a separate and different video stream from the mask overlay stream. As such, Bove's time stamps bear no relationship to the actual time of transmission of the mask overlay frame. According to the present Office Action at page 4, it is suggested that Eerenberg be combined with Bove to cure this defect in Bove's teachings.

It is also admitted in the present Office Action that Bove does not disclose determining a relative time difference between the received time stamp and a previous time stamp, as recited in the independent claims. Bove makes it clear that the received time stamp for the mask overlay frame is compared to the "time stamp of the current video [image] frame" so that the mask overlay can be properly matched up with the correct video image. *See Bove at paragraph [0083].* According to the present Office Action at page 4, it is also suggested that Eerenberg be combined with Bove to cure this additional defect in Bove's teachings.

Contrary to the assertion in the present Office Action on page 4, Bove does not communicate the relative time difference to a transmitter having a time base as one feature of

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transmission, as recited in the independent claims. Rather, Bove appears to utilize the relative time difference within the digital receiver 54 to determine whether the mask overlay frame matches up with the current video image frame. While the relative time difference is determined locally at the digital receiver, Bove does not broadcast or transmit or communicate that relative time difference to any entity outside the decompress thread shown in Figure 6. It should be noted that the digital receiver, in which all time difference computations are performed, is downstream of the transmission channel and lacks any channels, either downstream or upstream, with which it communicates such information. The time difference information is tracked in a software module within the digital receiver by model thread 520 interacting with mask thread 514 to insure that proper information is made available to the display screen 530 at the correct time. *See Bove at paragraph [0086]*. But this does not correspond to "communicating the relative time difference to a transmitter having as one feature of transmission a time base", as recited in independent claims 1, 7, and 9.

Contrary to the assertion in the present Office Action on page 4, Bove does not teach the limitation of having a means for the transmitter to adjust the time base according to the relative time difference, as recited in claims 1 and 9. Bove does not communicate the relative time difference to a transmitter of any kind let alone a transmitter having a time base. Bove uses the time difference between the time stamp on the mask overlay and the time stamp on the current video frame in the decompress thread to determine whether the mask overlay frame is synchronized to the current video image frame. This is not even the same time difference as recited in the present claims. If the mask overlay and current video image frame have the same time stamp, then synchronization of these images (mask overlay and current image) is correct. If the time stamps for the mask overlay and current image are different, the decompress thread is said to sleep for a time equal to the time difference of the mask overlay and video image time stamps. Bove does not teach either the existence of a time base or any adjustment of a time base. In no case does Bove adjust a time base or use any time difference to adjust a time base, as recited by claims 1 and 9.

Eerenberg appears to teach a transmitter and receiver arrangement wherein the transmitter sends video packets to the receiver. *See Eerenberg at Figure 1*. Prior to decoding the video packets, the receiver appears to determine a time difference between consecutive packet time stamps. *See Eerenberg at Figures 1 and 3 and paragraphs [0008] and [0026]*.

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Eerenberg then appears to teach that the clock frequency at the receiver is then influenced in some manner by the calculated time difference. *Ibid.* Eerenberg clearly states that he performs these actions at the receiver to guarantee a high degree of correctness of the transmission time stamps so that, at the receiver end, the transmission time stamps refer to the correct transport stream packet. *See Eerenberg at paragraphs [0014] and [0016].*

Bove does not teach, show, or suggest "transmitting the relative time difference to one or more wireless station receivers, wherein each of the one or more wireless station receivers adjusts the time base according to the relative time difference", as recited expressly in claim 7 and, in part, in dependent claim 2. Bove does not teach, show, or suggest the existence of wireless stations with which his "digital receiver" can communicate. Bove lacks any wireless stations with which a transmitter communicates. Without such wireless station receivers, there cannot be any time base adjustments by wireless stations. Bove cannot teach, show, or suggest any limitation dealing with wireless station receivers or time base adjustments made thereon because they do not exist in Bove at all.

Eerenberg does not communicate or transmit the time stamp difference anywhere within his system. The time stamp difference is used only by the receiver in which it was computed. So Eerenberg does not cure the defects in Bove with regard to the limitation of "a means for communicating the relative time difference to a transmitter having as one feature of transmission a time base", as recited in claims 1, 7, and 9. Moreover, Eerenberg does not cure the defects in Bove with regard to the limitation of "transmitting the relative time difference to one or more wireless station receivers", as recited in claim 7. For at least these reasons, it is submitted that Bove and Eerenberg do not teach, show, or suggest all the elements of independent claims 1, 7, and 9.

As a further related matter, the present Office Action fails to include any citation from either Bove or Eerenberg that corresponds to the limitation in claim 7 concerning "each one of the one or more wireless station receivers adjusts the time base according to the relative time base". In fact, at page 4, the present Office clearly states that "Bove et al. do not show receiver adjusts a time base according to the relative time difference", in reference to the limitation in claim 3 which is substantially identical to the quoted limitation above from claim 7. Without a showing of how the references apply to a particular limitation and with an express admission that the Bove reference does not teach substantially the limitation in question, it is believed that

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the USPTO has failed to establish a *prima facie* case of obviousness against claim 7 and the claims dependent thereon.

For all the reasons above, Bove and Eerenberg fail to teach, show, or suggest all the limitations in claims 1, 7, and 9 and dependent claim 2.

In light of the remarks above, it is believed that claims 1, 2, 7, and 9 would not have been obvious to a person skilled in the art upon a reading of Bove and Eerenberg, either separately or in combination. Therefore, it is submitted that claims 1, 2, 7, and 9 are allowable under 35 U.S.C. §103. Withdrawal of this rejection is respectfully requested.

Rejection Of Claim 3 Under 35 USC §103

Claim 3 stands rejected under 35 U.S.C. §103 as being unpatentable over Bove in view of Eerenberg and further in view of Anderson. This rejection is respectfully traversed.

Claim 3 is dependent from claim 2 and independent base claim 1, both of which are discussed in the section immediately above. The remarks above will not be repeated herein for the sake of brevity.

Anderson has been added to Bove and Eerenberg because, as stated in the present Office Action at page 5, "Bove et al. do not show receiver adjusts a time base according to the relative time difference." Even if, *arguendo*, Anderson cures this stated defect in the teachings of Bove and Eerenberg, a position with which Applicants neither agree nor acquiesce, Anderson does not cure the remaining defects in Bove and Eerenberg discussed above in the immediately preceding section with respect to the independent claims.

The combination of Bove, Eerenberg, and Anderson lacks any teaching, showing, or suggestion of "a means for communicating the relative time difference to a transmitter" and "a means for the transmitter to adjust the time base according to the relative time difference" and the transmitter communicating "to one or more receivers, the adjusted time base", as defined in claims 1 and 2 from which claim 3 depends. Thus, the combined references of Bove, Eerenberg, and Anderson fail to teach, show, or suggest all the elements in dependent claim 3.

In light of the remarks above and for all the reasons in the previous section with respect to claims 1 and 2, it is believed that claim 3 would not have been obvious to a person skilled in the art upon a reading of Bove, Eerenberg, and Anderson, either separately or combination.

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Therefore, it is submitted that claim 3 is allowable under 35 U.S.C. §103. Withdrawal of this rejection is respectfully requested.

Rejection Of Claim 8 Under 35 USC §103

Claim 8 stands rejected under 35 USC §103 as being unpatentable over Bove in view of Eerenberg and del Prado Pavon and in view of Mohindra. This rejection is respectfully traversed.

Claim 8 is dependent from independent claim 7 and includes all the limitations thereof. The allowability of claim 7 has been discussed above with respect to the Bove and Eerenberg references.

del Prado Pavon appears to be related to clock synchronization in wireless networks. But del Prado Pavon does not cure the defects in the teachings of Bove and Eerenberg because del Prado Pavon neither communicates the relative time difference to a transmitter and nor adjusts the time base in each of the one or more wireless station receivers according to the relative time difference, as defined in independent base claim 7.

Mohindra also fails to cure the deficiencies in Bove, Eerenberg, and del Prado Pavon with respect to the independent base claim. Mohindra appears to be related to cancellation of DC offsets in a high speed communication system. Similar to del Prado Pavon, Mohindra neither communicates the relative time difference to a transmitter and nor adjusts the time base in each of the one or more wireless station receivers according to the relative time difference, as defined in independent base claim 7.

In light of the remarks above and for all the reasons given with respect to the independent claims and particularly base independent claim 7 above, it is believed that claim 8 would not have been obvious to a person skilled in the art upon a reading of Bove, Eerenberg, del Prado Pavon, and Mohindra, either separately or combination. Therefore it is submitted that claim 8 is allowable under 35 U.S.C. §103. Withdrawal of this rejection is respectfully requested.

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Conclusion

In view of the foregoing, it is respectfully submitted that all the claims pending in this patent application are in condition for allowance. Reconsideration and allowance of all the claims are respectfully solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner contact the Applicants' attorney at (609) 734-6815, so that a mutually convenient date and time for a telephonic interview may be scheduled for resolving such issues as expeditiously as possible.

In the event there are any errors with respect to the fees for this response or any other papers related to this response, the Director is hereby given permission to charge any shortages and credit any overcharges of any fees required for this submission to Deposit Account No. 07-0832.

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